

Evolution of Marine Aviation

1920's



1940's

Nicaragua

Interwar Period

BGen Robert S. Walsh
Assistant Deputy Commandant for
Aviation

1940's



1960's

WWII

Korea

1960's



2000

Vietnam

Desert Storm

Brief to:

Sgt Major Symposium

2000



2015

OEF / OIF

Future



Marine Aviation Mission

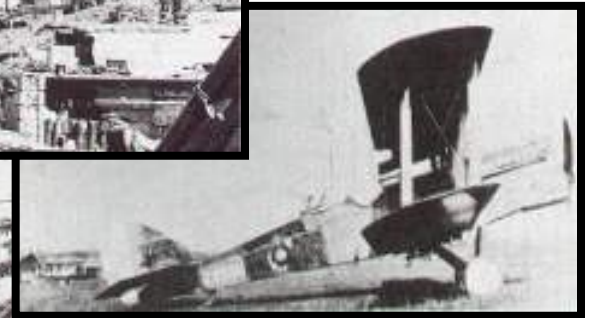


- Marine Aviation provides the MAGTF with the operational flexibility it needs to accomplish its objectives across the range of military operations
 - MCWP 3-2

Overview

Marine Aviation

- **New DC Aviation**
- **CMC Guidance**
 - **Strategic Vision**
- **Challenges**
- **Programs**
- **Path Forward**





CMC Guidance

Marine Aviation

-CMC 2006 Planning Guidance



- **“Build a service that is structured, educated, and positioned for the challenges of tomorrow...”**



- **“Examine the next phase of the Long War... ...and how we can best shape conditions now for success.”**



- **“Evolve Marine Corps and naval operating concepts... ...even as maintain our contingency and crisis response capability.”**





Marine Aviation

Marine Air: Posturing for the Future



Strategic Guidance

Fostering Jointness

ISO JFC Objectives



Deputy Commandant for Aviation (DC/A)

Marine Aviation

“Assists CMC in planning and coordinating staff activities on all matters related to

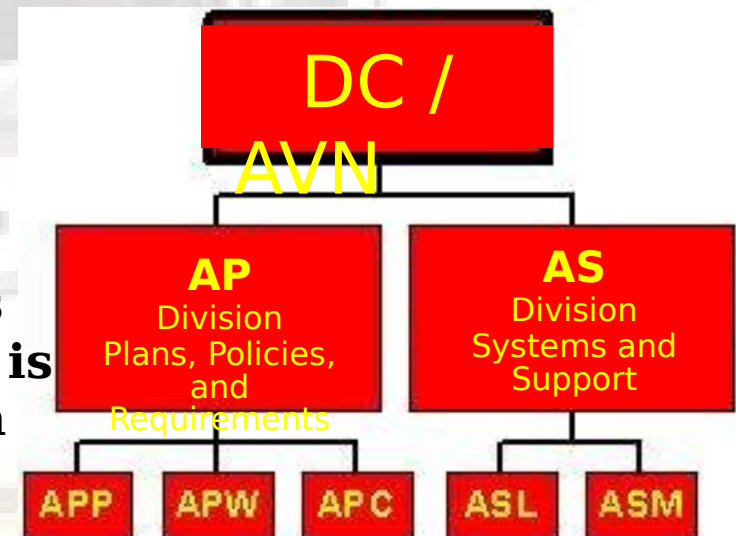
- **organization,**
- **equipment,**
- **manpower,**
- **training,**
- **support**

of Marine Corps aviation units and installations;

advises the CMC on systems acquisition and Joint matters related to aviation;

ensures Marine Corps aviation supports Expeditionary Maneuver Warfare AND is a Bottom Line

“DC/A runs Marine Aviation.”



Marine Aviation Priorities

Marine Aviation

- Sustain the Current Fight
- Prepare for the Long War
- Modernize the Force

DCA Goals

Marine Aviation

- Increased Readiness
 - Increased In-Reporting (IR) rates
 - Decreased out-of-reporting (OR) rates
 - Reduced Depot TAT
- Reduced Direct Maintenance Man-hours per Flight Hour (DMMH/FHP)
- Reduced Flight Hour Costs
- Extend Airframe Service Life for legacy aircraft
- Achieve programmed service life for new platforms
- Increase health of organizational and intermediate level maintenance departments

Fight & Train Now...
And Posture The Marine Corps For The Future

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Any One Day

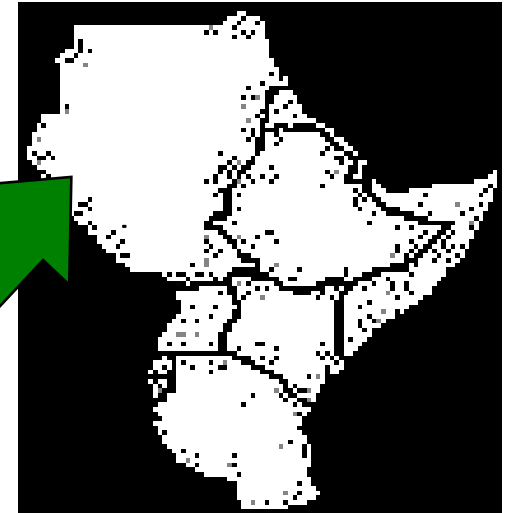
Marine Aviation

OIF



250 aircraft and
7,000 Aviation
Marines deployed
ISO GWOT

HOA



TAI



Marine



Aviation

MEU/UDP



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The Current Fight

This week in Iraq

Marine Aviation

Combat Flight Hours

2451.1

1597 sorties (228/day)

Missions

6 AEROSCOUTS

58 MEDEVACS

51 CASEVACS

3622 Pax Moved

**282,275lbs Cargo
Moved**

**Projection for the year at this rate: 125,000+
Hours:**

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Tempo Challenge

Marine Aviation

3 Year Turn-around Ratios (TAR) Jan 05- Dec 07

<u>Current</u>	<u>Future (FY-12)</u>	
VMU	1 : 1.0	No Change
HMLA	1 : 1.25	1.63
HMH (E)	1 : 1.68	2.13
HMH (D)	1 : 1.7	No Change
HMM	1 : 1.9	No Change
VMAQ	1 : 2.0	No Change
VMFA(AW)	1 : 2.32	1.76
VMFA	1 : 2.45	1.95
VMA	1 : 2.71	No Change
VMGR	1 : 3.0	No Change

Shortest to Longest

Assault Support Community Deployment-to-Dwell will continue to stress Operating Force

Fighting the Long War



OIF utilization rate 2 x WSPD

Reaching End of Service Life 218% faster

One VMA committed to GWOT uses 2 years of A/C life for that VMA



OIF utilization rate 3.5 x WSPD

Reaching End of Service Life 343% faster

One VMFA(AW) committed to GWOT uses 3.5 years of A/C life for that VMFA(AW)



OIF utilization rate 5 x WSPD

Reaching End of Service Life 500% faster

One VMAQ committed to GWOT uses 5 years of A/C life for that VMAQ



Utilization rate 2.0 times WSPD

Reaching End of Service Life 200% faster

One HMH committed to GWOT uses 2.0 years of A/C life for that HMH



Utilization rate 3.0 times WSPD

Reaching End of Service Life 312 % faster

One HMLA committed to GWOT uses 3.0 years of A/C life for that HMLA



Utilization rate 2.5 times WSPD

Reaching End of Service Life 245 % faster

One HMM committed to GWOT uses 2.5 years of A/C life for that HMM

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■ Marine Aviation ■



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Readiness – Aircraft Inventory Management

AH-1W	UH-1N		CH-53E	F/A-18D
188	95	T/M/S Required	161	104
176	87	Current Inventory	149	96
-35	-10	A/C in Depot	-34	-15
141	77	A/C Available	115	81
-23	-11	(FRS/RDT&E/HMX)	-24	-20
118	66	A/C Available to MARFOR's	91	61
18	9	PMAA A/C per SQDN	16	12
2.5 / -45	2.5 / -22	Avg Deployed SDQN / A/C	3 / -48	3 / -36
5.5 / 73	5.5 / 44	CONUS SQDN / A/C	5 / 43	3 / 25
13.3	8.0	A/C per SQDN	8.6	8.3
70.6%	69.4%	Current AVG MC % Rate CONUS	64.9%	77.1%
9.4	5.5	Avg Avail to Train	5.5	6.4

HMLA / HMH / VMFA(AW) Aircraft Inventory Shortfalls will have substantial training impacts on CONUS units



Aircraft Inventory Challenge

Marine Aviation

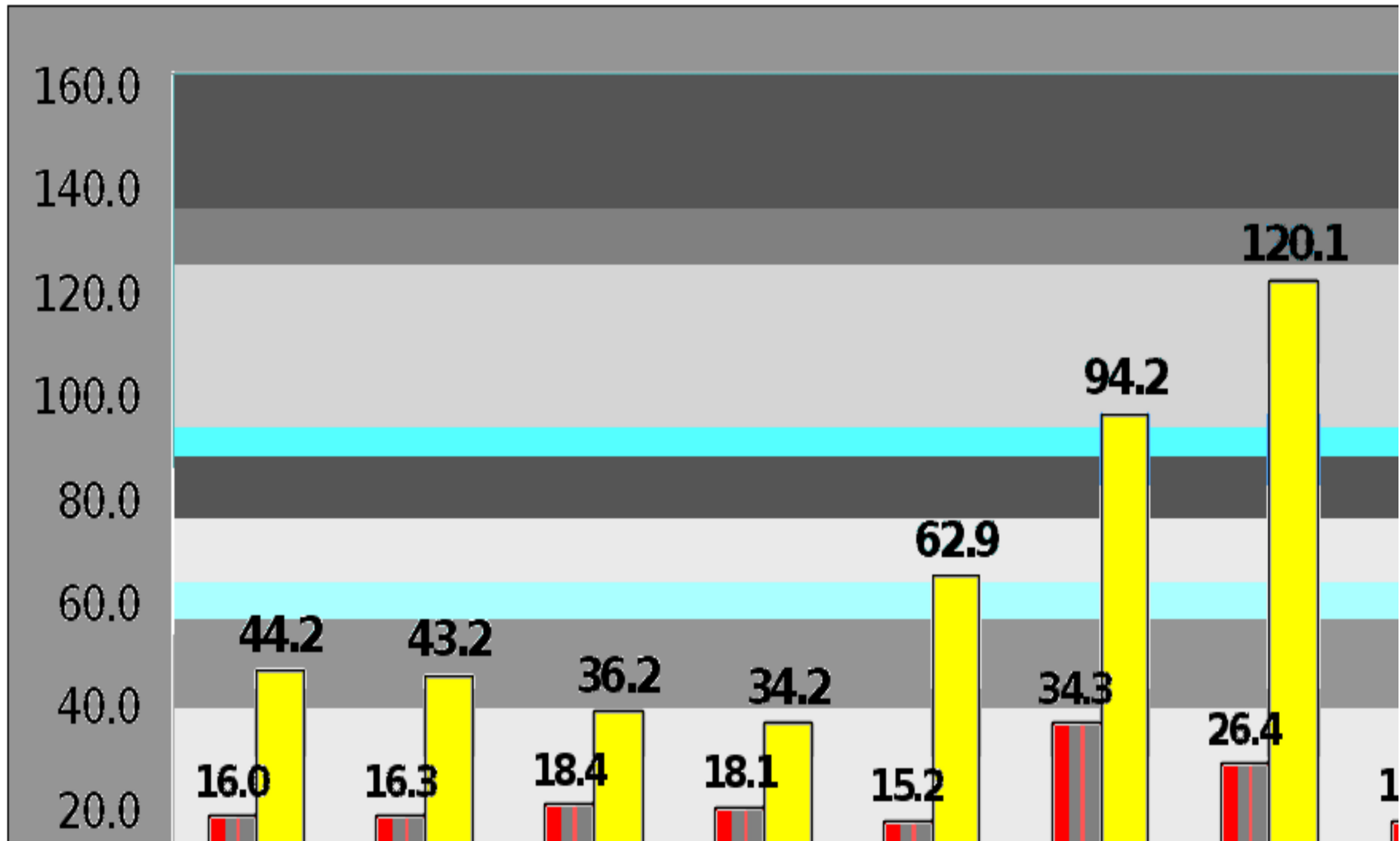
Current In-Reporting Status Aircraft as of 26 Jul 07

		PMAA	#ASSN	% ASSN	#IR	% IR	#OR	% OR
HMLA	AH-1W	144	149	90.3%	135	93.8%	14	73.8%
HMLA	UH-1N	72	79	96.3%	70	97.2%	9	93.4%
HMM	CH-46E	156	176	98.3%	149	95.5%	27	119.4%
HMH	CH-53E	112	121	90.3%	98	87.5%	23	115.8%
HMH	CH-53D	30	34	103.0%	24	80.0%	10	323.5%
VMM	MV-22B	32	25	71.4%	23	71.9%	2	93.3%
VMA	AV-8B	98	107	99.1%	88	89.8%	19	191.8%
VMFA	F/A-18A/C	132	126	83.4%	109	82.6%	17	107.2%
VMFA	F/A-18D	60	71	102.9%	54	90.0%	17	183.6%
VMAQ	EA-6B	20	23	95.8%	15	75.0%	8	208.7%
VMGR	KC-130	60	61	88.4%	56	93.3%	5	62.8%
Total		916	972	92.7%	821	89.6%	151	122.6%



A/C Service Life Challenge

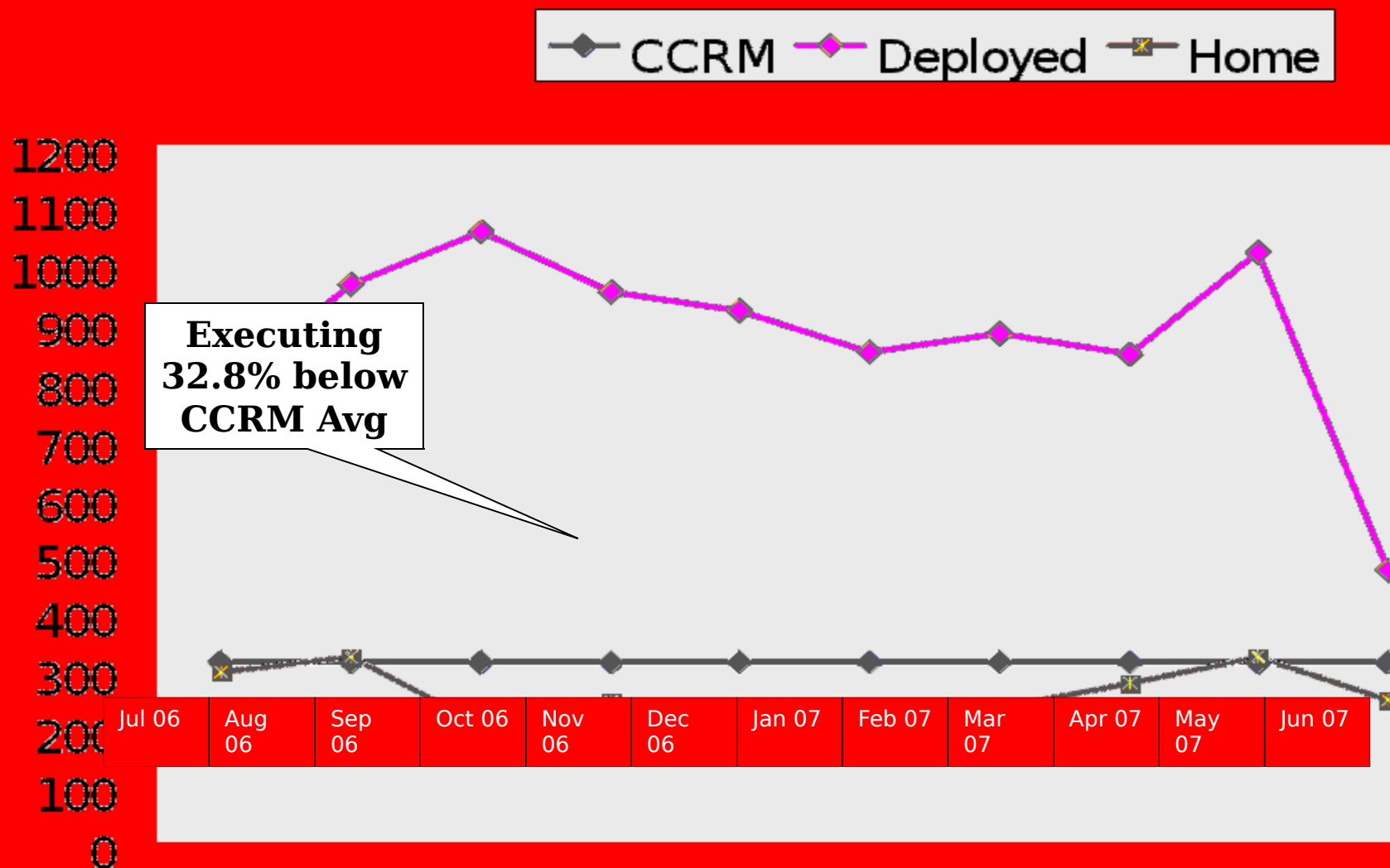
Marine Aviation





CH-53E

CH-53E Deployed vs Home Hours





Sustain Legacy Systems

Marine Aviation

**CONUS
Preset**



DEPLOY

**Combat
Sustainment
In Theater**

Mosul

Baghdad



Supplementals



REDEPLOY

**Reconstitution
CONUS**

**CONUS
Industrial &
Integrated
Logistics Support
(IILS)**

DEPOT INDUCTION



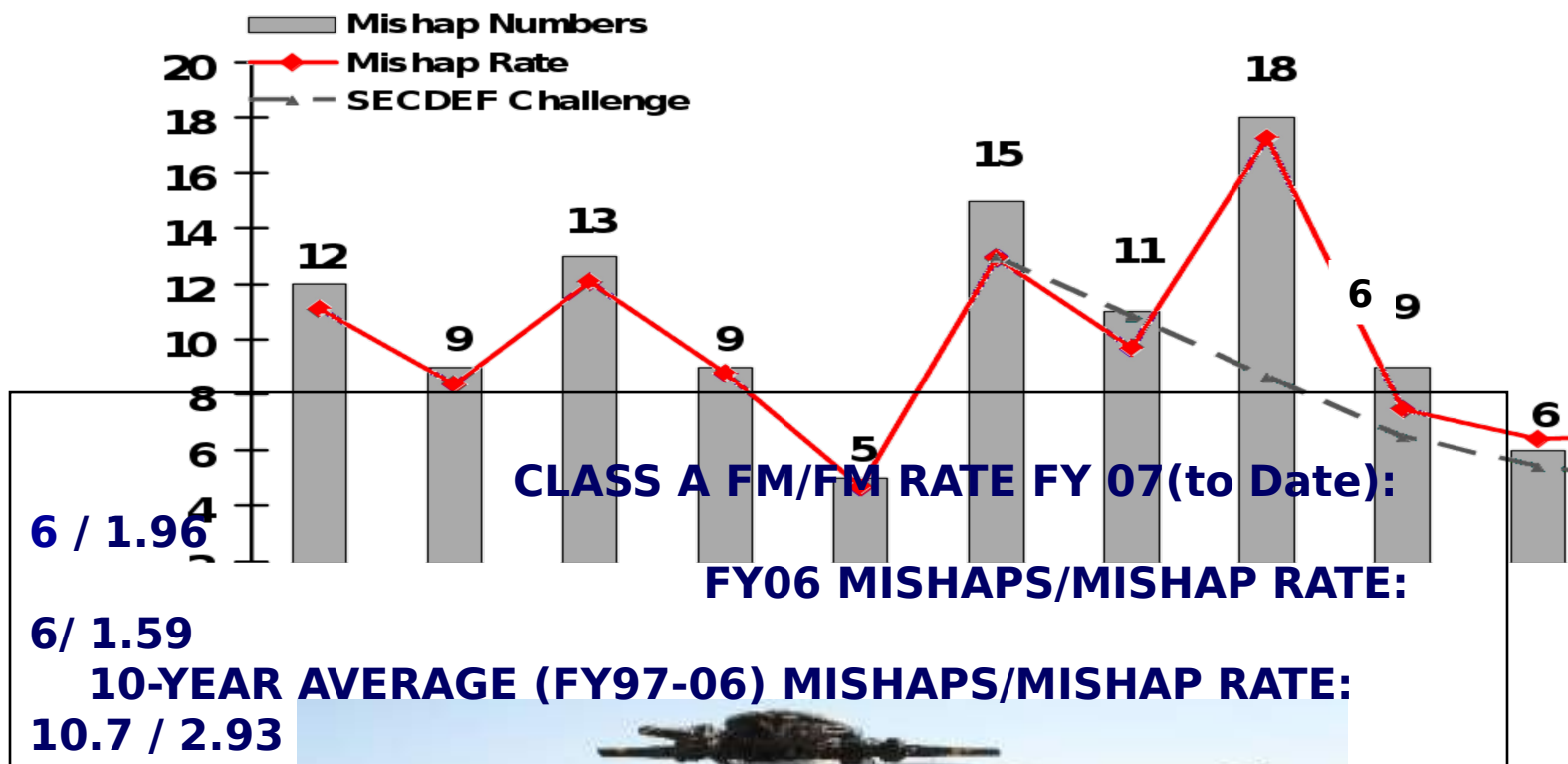
RETURN TO FLEET





Force Protection

Marine Aviation



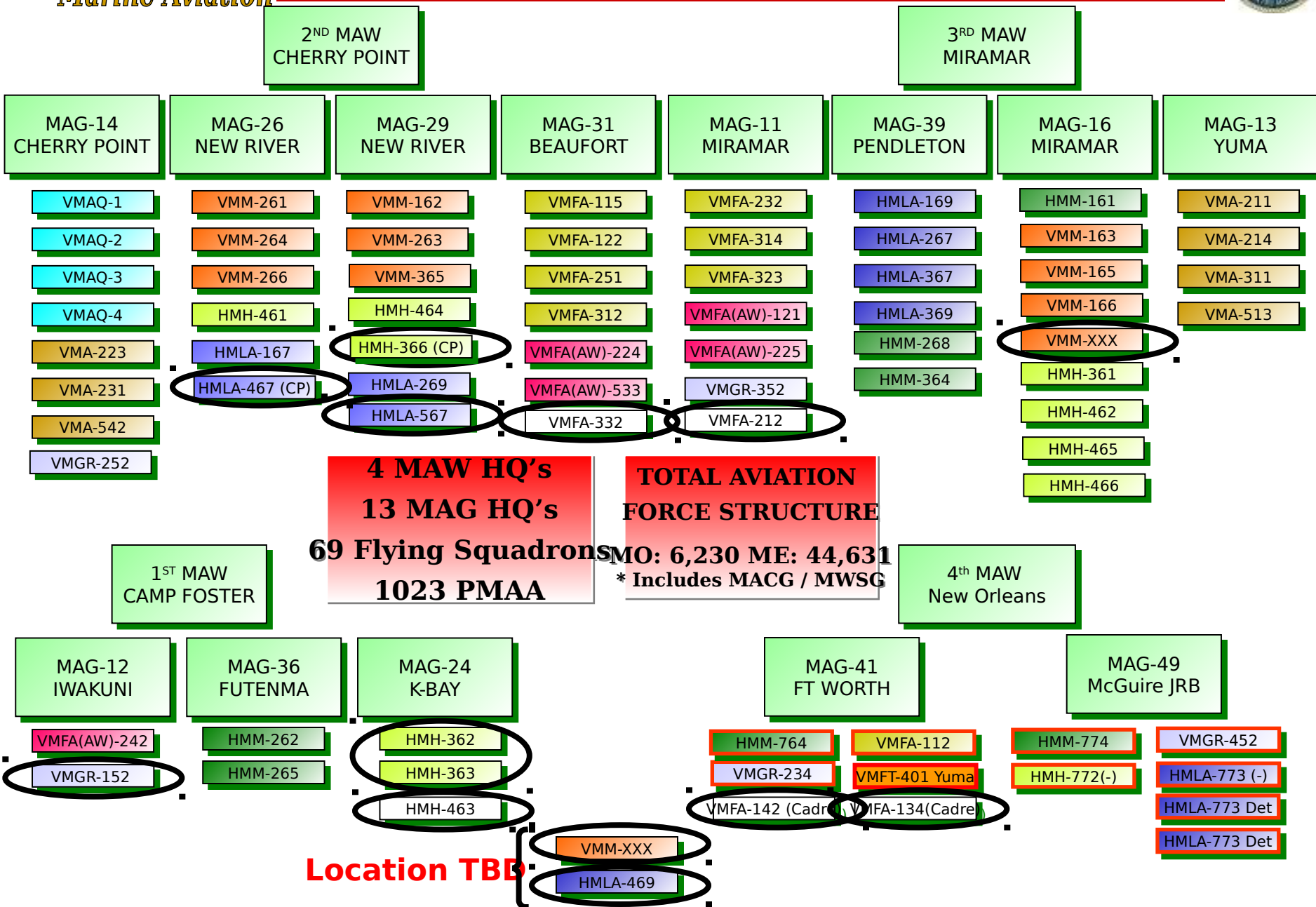


202K Balanced Force

Marine Aviation

	Present	202K Balanced Force	
Unit	AC/RC	AC/RC	DE
MAW HQ	3 / 1	3 / 1	
HMLA	6 / 2	9 / 1	+2 HMLA (A
HMH	6 / 2	9 / 1	+2 HMH (CH
VMM	18 / 4	18 / 4	+0 VMM (M
*VMFA/MA	21 / 3	21 / 3	+0 VMFA (F
VMGR	3 / 2	3 / 2	+0 VMGR (H

Aviation Combat Element 2012



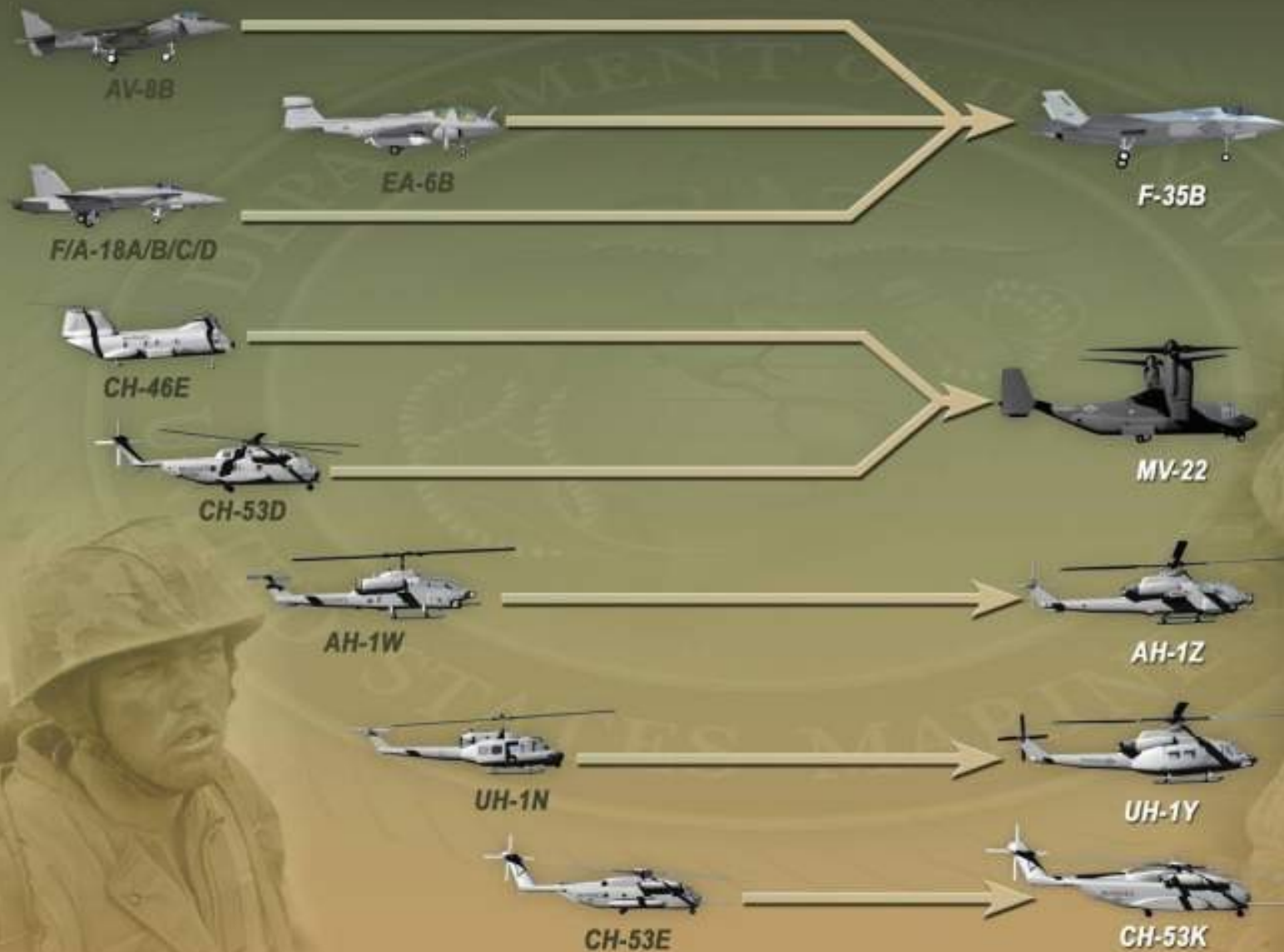


Marine Aviation Modernization



Today

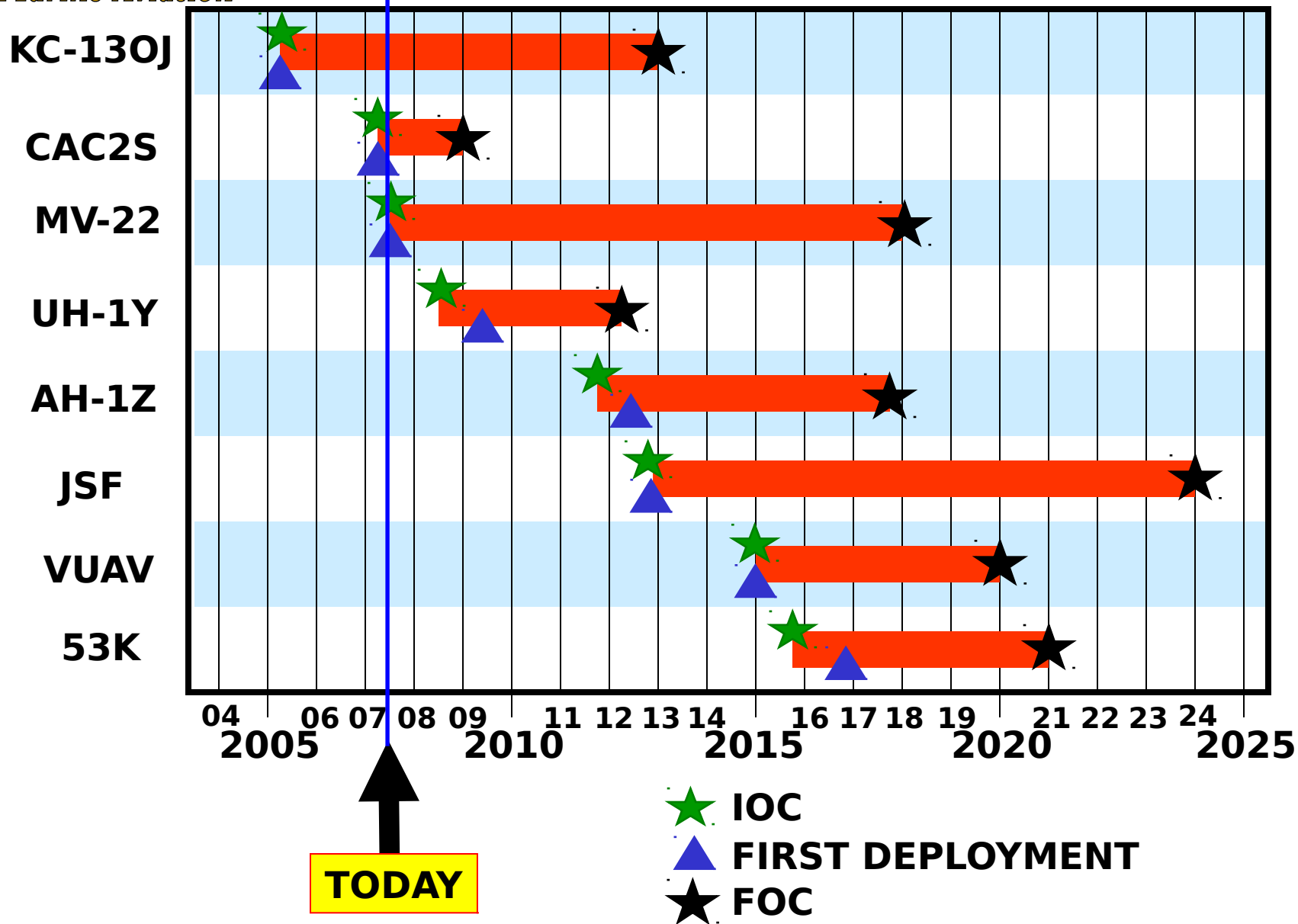
2015





Program IOC/FOCs

Marine Aviation





KC-130J

Marine Aviation

- Currently flying in Iraq (6 Aircraft)
- VMGR-152 begins transition Aug 2007
- IOC: 2005
- Total Force:
 - KC-130T: 28*
 - KC-130J: 51

Issue: Transition
USMCR KC-130J



*Reserve KC-130T's to be replaced by KC-130J's

MV-22 Osprey

Marine Aviation

- IOC: Declared 1 JUN 07
- Over 15,000 hrs since '02
- Objective: 360 MV-22s
- VMM-263
 - Deploys in 07
- VMM-162
 - Stood up Sep 06
 - Deploys Jan 08
- VMM-266
 - In Transition

Issue: Growing pains



Jan 08



Sept 07



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UH-1Y & AH-1Z

Marine Aviation

- Program of Record
- UH-1Y
 - IOC: FY-08
 - Obj: 100
- AH-1Z
 - IOC: FY-11
 - Obj: 180
- Build New Strategy
- New HMLA-467
 - FY-08
- Program Goal is for 3 new HMLA squadrons and 100 more airframes.

Issue: Production Capability



Can't get here fast enough





STOVL Joint Strike Fighter

Marine Aviation

- First Flight 2008
 - IOC: FY-12
 - Objective: 420
 - Program of Record
- 
- Eglin AFB Integrated Training Center (ITC) 2010
 - PCS 2009
 - Screen / Slate 2008 First F-35B Squadron CO

Issue: “Disagreement” between USN and USMC on mix of aircraft type for Carrier Air Wing



CH-53K

Marine Aviation

- AoA: “New build”
most cost-effective (vs. SLEP)
- 53K is derivative design of CH-53E
 - New blades
 - New cockpit
 - New cargo handling
 - Drive train improvements
- Planned IOC: 2015



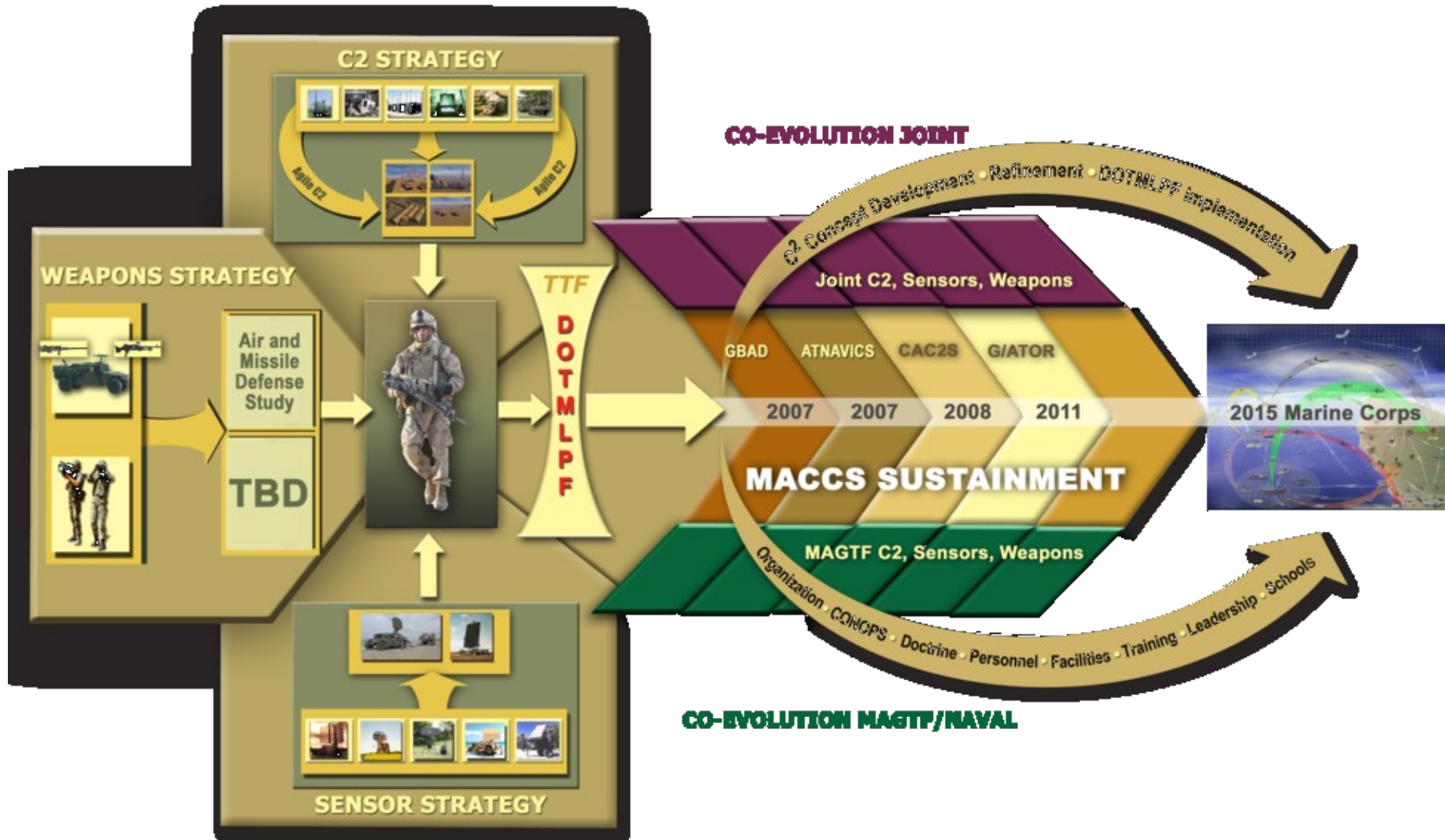
Issue: Sustaining CH-53E to meet CH-53K

GWOT MVP, but we're burning out the ol' workhorse

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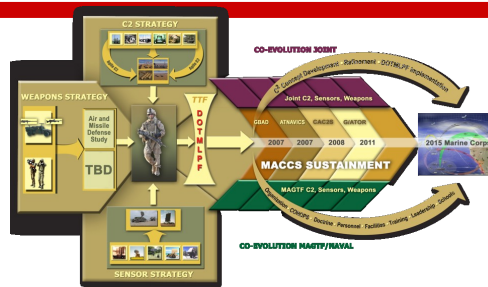
Command and Control Systems

Marine Aviation



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C2 Programs



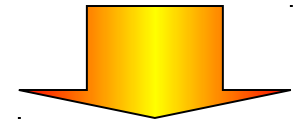
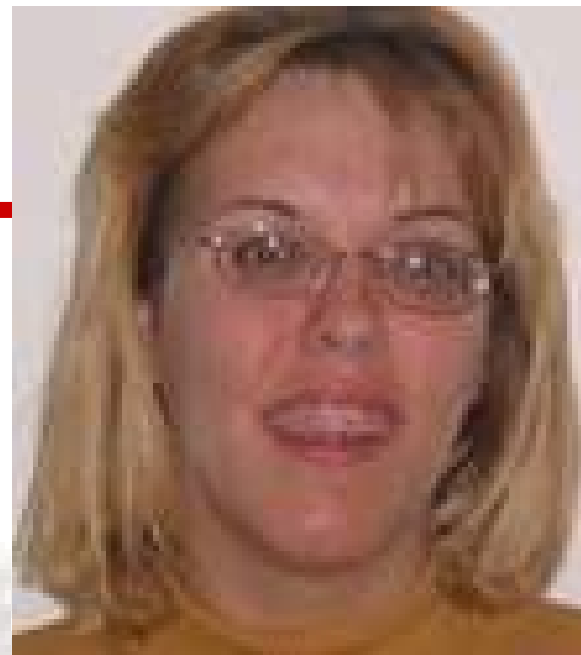
- **Sustain the Legacy Systems**
- **ATNAVICS** - will replace the current precision approach radar sensors and associated C2 MATCALS sub-systems. (Currently being fielded)
- **CAC2S** - replaces six disparate legacy platforms and provides expeditionary and common C2 platforms for Marine Aviation that is employable from the sea base and ashore. As a joint force C2 enabler, CAC2S will help transform EMW concepts into capabilities that will fully support joint operations.
 - IOC FY 08
 - MEF = 9 Sub-Systems for TACC, TAOC, DASC
- **G/ATOR** - 3D HMMWV mounted, short/medium range radar
 - IOC Increment I FY 11 (Increments II thru IV FY 12-15)
- **GBAD Modernization** - Sustain / Modernize / Evaluate Secondary Missions

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Path Forward

Marine Aviation

- Increase the size of the USMC
 - Additional squadrons
 - Cadre squadrons
 - Quality Retention is key
- 2007 – 2015 Transition 8 T/M/S to 5
 - High of 13 T/M/S during the transition
 - Transition is never pretty but it's worth it!
 - Continue to be busy during the transition
- CMC Goal
 - 3 Balanced MEFs Ready to Deploy
 - Cannot accept risk in the short term
 - AVPLAN will get us there





The Power of the MAGTF ISO the Joint Force

- Fight as part of a Joint Force -



“The only excuse for aviation is its usefulness in assisting the troops on the ground.”

Maj Cunningham 1920

“The MEF intact is the greatest force on the battlefield”

Gen Conway 2003

Supporting Our Most Lethal Asset

QUESTIONS ?

Marine Aviation
Air, Land or Sea...

Full Spectrum Capabilities

Force Protection

Command & Control

Logistics Readiness Training

Maneuver

Large Scale Conventional War **Limited War** **Irregular Warfare** **Non-combatant Evacuation** **Humanitarian Assistance**

1920's **1940's** **1940's** **1960's** **2000** **Today** **2015**

Nicaragua **Interwar Period** **WWII** **Korea** **Vietnam** **OEF / OIF**

F-35B **MV-22** **AH-1Z** **UH-1Y** **CH-53K**

EA-6B **EA-39** **EC-130**

Supporting Our Most Lethal Asset



QUESTIONS?

Marine Aviation
Air, Land or Sea...

Full Spectrum Cap

Large Scale Conventional War

Extended view

1. **Introduction**
 2. **Methodology**
 3. **Results**
 4. **Discussion**
 5. **Conclusion**
 6. **References**
 7. **Appendix**
 8. **Index**
 9. **Glossary**
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Non-Consistent Experiments

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Landeshauptstadt

5422

Legislative
Business
Training

Command & Control

Source Protection